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10/725,127	12/01/2003	Harry Bussey JR.		2659

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EXAMINER
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SHARMA, RASHMI K

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



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**GROUP 3600**

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/725,127  
Filing Date: 12/01/2003  
Appellant(s): HARRY BUSSEY

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Francis C. Hand  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 6/01/2007 appealing from the Office action mailed 8/17/2006.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

5,744,186	Harrison	4-1998
4,328,913	Whiteman	5-1982
3,842,971	Hook	10-1974
3,041,185	Martin	6-1962
3,702,128	Trotter, JR	11-1972

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Harrison (US Patent number 5,744,186).

Harrison discloses a hopper (2) for supplying loose fill material (1), one housing (outer walls of screw conveyor 3) having an inlet (area under hopper 2 in Figure 1) in

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communication with the hopper (2) to receive a flow of material (1) and an outlet (7) leading into 15 in Figure 1) for discharging the received material (1), a screw (3) having a plurality of flights, the screw (3) rotatably mounted in the housing for conveying the material (1) received through the inlet towards the outlet, a steam chamber (6) in communication with the outlet of the housing to receive the material therefrom, a paddle frame (structure which rotates paddles 17 and the horizontal shaft within chamber 6 in Figure 1) rotatably mounted in the chamber (6) to rotate about a central axis, the paddle frame having at least one scoop (17) mounted on a periphery thereof and extending longitudinally thereof in spaced parallel relation to the central axis, the scoop (17) being disposed in spaced relation to the outlet of the housing for scooping material delivered into the steam chamber (6) peripherally of the steam chamber (6), wherein the paddle frame has a pair of scoops (17) disposed on diametrically opposite sides thereof.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harrison (US Patent number 5,744,186) in view of Hook (US Patent number 3,842,971).

Harrison as disclosed above fails to show an L-shaped scoop.

Hook does disclose an L-shaped scoop (152).

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It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the shape of Harrison's scoop to be L-shaped as taught by Hook in order to provide for a more secure mounting structure so that the paddle can operate as necessary.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harrison (US Patent number 5,744,186) in view of Whiteman (US Patent number 4,328,913).

Harrison as disclosed above fails to show a screw having some flights having a smaller radius than the remainder of the flights.

Whiteman does disclose a screw having some flights having a smaller radius than the remainder of the flights (see Figures 2 and 3).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Harrison's flight radii in the area under the hopper, as taught by Whiteman in order to provide for a varied and/or more finely process of separating of the material coming out of the hopper to be conveyed.

Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harrison (US Patent number 5,744,186) in view of Trotter (US 3,702,128) and Martin (US Patent number 3,041,185).

Harrison as disclosed above fails to show a pair of hoppers, a pair of housings and a pair of screws.

Martin does disclose a pair of hoppers (60).

Trotter does disclose a pair of screws.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to add pairs of hoppers and screws to Harrison's invention as taught by Martin and Trotter in order to provide for double the amount of material processed and conveyed. It also would have been obvious to provide for a pair of housings in which to house each screw conveyor for each respective hopper since simply doubling the invention side by side would essentially require separate housings as well.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harrison (US Patent number 5,744,186) in view of Trotter (US 3,702,128) and Martin (US Patent number 3,041,185) and Whiteman (US Patent number 4,328,913).

Harrison as modified by Trotter and Martin above, fail to show a screw having some flights having a smaller radius than the remainder of the flights.

Whiteman does disclose a screw having some flights having a smaller radius than the remainder of the flights (see Figures 2 and 3).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Harrison's flight radii in the area under the hopper, as taught by Whiteman in order to provide for a varied and/or more finely process of separating of the material coming out of the hopper to be conveyed.

***Allowable Subject Matter***

Claims 9-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Dependent claims 9 and 13 recite the structural limitation of a steam expander comprising a paddle frame having a skeletal construction including a central rotatable shaft, a pair of plates secured coaxially to and along said shaft and a pair of paddles secured to and between said plates to agitate and move loose fill material delivered into said steam chamber, in combination with the rest of the recited structure, clearly defines over the prior art.

**(10) Response to Argument**

Applicant argues that Harrison fails to show the conditioner expanding the mash passing through it and at least one hopper for supplying expandable loose fill material. However, the hopper (2) is clearly shown in figure 1 and column 4 line 41, and steam chamber (conditioner 6) is considered to inherently expand any type of mash passing therethrough.

Applicants also argue that Harrison fails to show "at least one scoop mounted on a periphery thereof and extending longitudinally thereof in spaced parallel relation to said central axis". However, as can be seen in Figure 1, paddles and/or scoops (17) are each clearly situated along the periphery of the horizontal shaft (or central axis) of



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chamber (6) and each paddle and/or scoop (17) has a longitudinal extent along the periphery of the horizontal shaft, thereby meeting Applicant's claim limitations. The definition according to Merriam-Webster's Collegiate Dictionary 10<sup>th</sup> Edition being used for the term "scoop" is as follows: *the action of scooping*.

Applicant argues that "a rotatable shaft cannot constitute a paddle frame".

However, the Examiner disagrees. It should be noted that the Examiner is relying upon the shaft as well as the paddles and the chamber (6) itself in referencing "a paddle frame". The Applicant fails to include or further claim any structure whatsoever within the claim language towards "a paddle frame", so why can't just a rotatable shaft constitute a paddle frame? According the scope of what Applicant's have structurally claimed, any one (or more) structure(s) can indeed meet this claim limitation.

Since Applicant argues that "it cannot be seen how the one paddle and the horizontal shaft can be mounted on a periphery of a paddle frame", Applicant is asked to specifically point out exactly what one structure and reference numeral in the drawings denotes the paddle frame, since Applicant has failed to expressly disclose this structure in the drawings. Even in Applicant's drawings, it appears as though no one structure is capable of meeting "a paddle frame" and therefore does not meet Applicant's own claim language interpretation.

Harrison thereby does indeed disclose "a pair of said scoops disposed on diametrically opposite sides thereof", regarding claim 2, and Harrison in view of Whiteman does indeed disclose a screw having flights being disposed in alignment with said inlet and being of a smaller radius than the remainder of the flights.

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**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

This examiner's answer contains a new ground of rejection set forth in section **(9)** above. Accordingly, appellant must within **TWO MONTHS** from the date of this answer exercise one of the following two options to avoid *sua sponte* **dismissal of the appeal** as to the claims subject to the new ground of rejection:

**(1) Reopen prosecution.** Request that prosecution be reopened before the primary examiner by filing a reply under 37 CFR 1.111 with or without amendment, affidavit or other evidence. Any amendment, affidavit or other evidence must be relevant to the new grounds of rejection. A request that complies with 37 CFR 41.39(b)(1) will be entered and considered. Any request that prosecution be reopened will be treated as a request to withdraw the appeal.

**(2) Maintain appeal.** Request that the appeal be maintained by filing a reply brief as set forth in 37 CFR 41.41. Such a reply brief must address each new ground of rejection as set forth in 37 CFR 41.37(c)(1)(vii) and should be in compliance with the other requirements of 37 CFR 41.37(c). If a reply brief filed pursuant to 37 CFR 41.39(b)(2) is accompanied by any amendment, affidavit or other evidence, it shall be treated as a request that prosecution be reopened before the primary examiner under 37 CFR 41.39(b)(1).

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Extensions of time under 37 CFR 1.136(a) are not applicable to the TWO MONTH time period set forth above. See 37 CFR 1.136(b) for extensions of time to reply for patent applications and 37 CFR 1.550(c) for extensions of time to reply for ex parte reexamination proceedings.

Respectfully submitted,

Rashmi Sharma

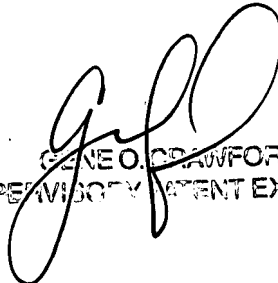
**A Technology Center Director or designee must personally approve the new ground(s) of rejection set forth in section (9) above by signing below:**

Kathy Matecki

Conferees:

Gene Crawford 

Meredith Petravick 

  
GENE O. CRAWFORD  
SUPERVISORY PATENT EXAMINER